# Seasonal Animals in Roman Mosaics

# Roma Mozaiklerinde Mevsim Hayvanları

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## **Abstract**

Animals were popular subjects for Roman mosaics, featuring in many contexts. In his influential book, Season Mosaics of Roman North Africa, David Parrish included a short section on animals symbolising the Seasons, appearing either with personifications or representing the Seasons by themselves.

This article widens the discussion and looks beyond North Africa. It begins by examining mosaics on which personifications of the Seasons ride animals and continues with those in which the association is progressively less direct, with a view to analysing which animals can be shown to carry seasonal connotations and whether those animals were associated with more than one season.

Mosaics in which four animals appear without personifications are also considered in order to assess whether or not they represented the Seasons. The presence of other seasonal imagery supports this idea, while factors such as the context in which the animals appear and the order in which they are shown can suggest an answer one way or the other.

The aim of the article is to demonstrate that whenever four animals are depicted in a mosaic it is worth considering whether they might have seasonal associations, while bearing in mind that this will not necessarily be the case in every instance.

Keywords: Seasons, animals, Parrish, Hanfmann, Abad Casal.

## Öz

Hayvanlar, birçok bağlamda yer alan Roma mozaikleri için popüler konular arasındadır. David Parrish'in etkileyici kitabı Season Mosaics of Roman North Africa'da, mevsimleri simgeleyen, ya kişileştirmelerle ortaya çıkan ya da Mevsimleri kendi başlarına temsil eden hayvanlar hakkında kısa bir bölüm yer almaktadır.

Bu makale tartışmayı genişletmekte ve Kuzey Afrika'nın ötesini ele almaktadır. Hangi hayvanların mevsimsel çağrışımlar taşıdığının gösterilebileceğini ve bu hayvanların birden fazla hayvanla ilişkilendirilip ilişkilendirilmediğini analiz etmek amacıyla, mevsimlerin kişileştirmelerinin hayvanlara bindiği mozaikleri inceleyerek başlanacak ve ilişkilendirmenin giderek daha az doğrudan olduğu mozaiklerle devam edilecektir.

Mevsimleri temsil edip etmediklerini değerlendirmek için dört hayvanın kişileştirilmeden göründüğü mozaikler de dikkate alınmıştır. Diğer mevsimsel görüntülerin varlığı durumu desteklerken, hayvanların göründüğü bağlam ve gösterildikleri sıra gibi faktörler şu ya da bu şekilde bir cevap verebilir.

Makalenin amacı, bir mozaikte dört hayvan tasvir edildiğinde, bunların mevsimsel birlikteliklerinin olup olmadığını düşünmeye değer olduğunu göstermek, ancak bunun her durumda böyle olmayacağının farkında olmaktır.

Anahtar Kelimeler: Mevsimler, hayvanlar, Parrish, Hanfmann, Abad Casal.

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Seasonal imagery in mosaics is so rich and widespread that it is easy to focus on the main figures of the Seasons themselves and to overlook the smaller details with seasonal significance. Quadrupeds and birds are often noted when they appear as seasonal attributes helping to identify the figures with whom they are shown, such as the ducks commonly held by Winter or swallows accompanying Spring. Rather less attention has been paid to animals appearing with Seasons but not as such attributes, or to animals that might themselves represent the Seasons in mosaics in which images of traditional male or female Seasons are not present. It is these that form the subject of this study.

It is a pleasure to offer this article in honour of David Parrish, whose prolific and important work on images relating to seasons and time includes the entries for *Menses* in *Lexicon Iconographicum Mythologiae Classicae (LIMC)* and his influential book, *Season Mosaics of Roman North Africa*. My aim is to build upon his section on seasonal animals in the latter (1984: 26-28) by looking beyond North Africa, expanding upon the examples he cites in one of his footnotes (1984: 27 n.67). I will also consider why particular animals were linked with specific seasons, the starting point again being the useful comments in Parrish's book.

Hanfmann's two volumes entitled *The Season Sarcophagus in Dumbarton Oaks* were published in 1951, thus preceding Parrish's work which was able to take it into account. In his catalogue, Hanfmann listed around 120 Seasons mosaics of which three-quarters showed female Seasons and the rest male. Drawing from such a wealth of material, his focus was on the human figures with only occasional mention of any quadrupeds or birds accompanying them; there was no separate category for seasonal animals. His comments about statuary, but of wider application, emphasise that identification of Seasons 'is beset with difficulties ... Complete certainty can be achieved when the whole set of four Seasons, or at least part of it is found ...' (1951: II, 159).

Despite the length of the list he compiled, Hanfmann's catalogue was not intended to be exhaustive and there have, in any event, been many discoveries of Seasons mosaics in the 70 years since his work appeared. The entries for *Horae*, the female Seasons, and *Tempora Anni*, the male Seasons, were included in *LIMC* in 1990, written by Lorenzo Abad Casal (1990a and 1990b). They include nearly 200 mosaics, including those featuring in sections for Seasonal Activities, Birds, Other Animals, Animals pulling Wagons, and Plants and Fruit<sup>1</sup> (1990b: sections L.-P., nos 191-194, 203-205, 209-212, 216-217, 223-230, 234-238). The literature has since been expanded for the mosaics of the late Roman period, including the Dair Solaib mosaic included in this article (Decriaud 2011).

This study brings together and discusses over 30 mosaics, drawing on the information amassed by Hanfmann, Parrish and Abad Casal, and supplemented by more recent discoveries. Of these, I consider that 24 can reasonably be regarded as showing Seasonal animals. While this cannot pretend to be a complete list, it is sufficient for some conclusions to be put forward. The seasonal significance of the animals in the remaining mosaics is uncertain or disputed, but they merit discussion and I hope that the issues raised will be helpful in assessing other examples in future.

I begin by examining mosaics in which personifications of the Seasons ride animals or are directly adjacent to them to the extent that they are almost in contact, and then turn to animals that pull chariots containing seasonal imagery,

<sup>1</sup> My translation from the German.

followed by those appearing in scenes in association with Seasons. The discussion then moves to animals appearing in mosaics with figures of the Seasons but in separate compartments, concluding with those in mosaics without depictions of Seasons, either with seasonal plants or without any other seasonal imagery. After collating these examples, I end with some depictions where the seasonal nature of the animals is uncertain or problematic. I have not attempted to discuss the dating of the mosaics, which is a complex topic for which information is not always readily accessible or definitive, but this would form an interesting direction for future research.

Some general conclusions follow the discussion. Throughout, numbers and letters refer to the Catalogue entries at the end of this article which provide a select bibliography for works relating to the animals in the mosaics in question. References to images of all of the mosaics are contained in the bibliography: this article is a synthesis of information drawn from key publications about Seasons mosaics throughout the Roman empire and it has not been possible to study all the mosaics at first hand. I am grateful to the persons and institutions named in the figure captions for help with illustrations but unfortunately it has not been possible to illustrate all the mosaics discussed. A series of Tables sets out the depictions of the various quadrupeds and birds, and then tabulates them according to the Season they represent.

# Animals Ridden by or Placed Directly Adjacent to Seasons

Arguably the mosaic with the clearest link between Seasons and animals is the Calendar Mosaic from Saint-Romain-en-Gal in which each Season rides a different quadruped (1) (Fig. 1). One of four compartments originally at the centre of the mosaic shows Winter as a heavily draped woman seated on a boar, while the other three compartments each have a depiction of a *putto* respectively riding a bull for Spring, a lion for Summer and a tiger or tigress for Autumn; the latter is likely as there is the hint of a teat.

Figure 1 Seasonal animals in the Calendar Mosaic from Saint-Romain-en-Gal, now in the Musée d'Archéologie nationale at Saint-Germain-en-Laye. Photo: Patricia Witts.



Evidently the Monnus-Mosaik from Trier also showed Seasons riding quadrupeds although in this case they were placed at the corners of the mosaic (2) (Fig. 2). The surviving *putto* is labelled AVTVMNVS, making his seasonal identity explicit. He rides a leopard, or probably a leopardess as the animal has a row of teats, with the adjacent compartment containing the bust of October.

Traces of a second *putto* were found in the next corner. Although his mount was lost, he can be identified with Summer as he had the bust of July in an adjacent compartment and the zodiac symbol of a lion in a compartment to the side (cf Hanfmann 1951: II no. 304, Winter).

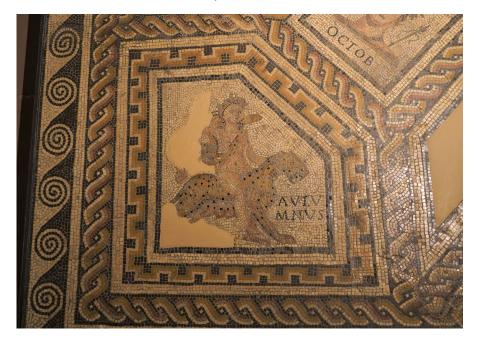


Figure 2
Autumn from Monnus-Mosaik, Trier.
Public Domain Source: TimeTravelRome,
CC BY 2.0 <a href="https://creativecommons.org/licenses/by/2.0">https://creativecommons.org/licenses/by/2.0</a>, via Wikimedia Commons.
<a href="https://commons.wikimedia.org/wiki/File:Rheinisches\_Landesmuseum\_Trier\_DSC03197\_(51290482147).jpg">https://commons.wikimedia.org/wiki/File:Rheinisches\_Landesmuseum\_Trier\_DSC03197\_(51290482147).jpg</a>.

The female figures in the Littlecote mosaic lack the usual seasonal attributes but have generally, if not unanimously, been accepted as Seasons (Hanfmann 1951: II no. 104; Toynbee 1981: 3; *contra* Smith 1977: 150 no. 139; and see Abad Casal 1990a: no. 57) (3) (Fig. 3). Their seasonal nature is supported by the different amounts of drapery they wear, appropriate to the season in question. They have been tentatively identified by Walters as Aphrodite holding a mirror, representing Spring; Nemesis/Leda holding a swan, representing Summer; Demeter with a



Figure 3 Part of the Littlecote mosaic. From Samuel Lysons, *Reliquiae Britannico-Romanae* 1813-1817 Vol. I.IV pl. IX.

staff entwined with leaves, representing Autumn; and Persephone extending her arm towards Demeter, representing Winter (1984: 436-437; Demeter's staff might be a torch). Although the figures have been regarded by some scholars (for instance, Toynbee 1981: 2, 3) as riding the beasts with which they are represented, Walters points out that this does not seem to be the case: they do not have a leg drawn up onto the flank of their mount or an arm embracing the animal's neck but instead their feet are firmly on the ground (1984: 435-436; Witts 2011: 151). Using the Latin names more appropriate to the British location and adopted by Abad Casal (1990a: no. 57), Venus is in front of a deer, Leda a leopard, Ceres a bull and Proserpina a goat, in an anti-clockwise sequence. I have argued elsewhere that a more traditional arrangement of the animals is evident if they form a sequence that is separate from the female figures, this time clockwise: the deer for Winter, the goat for Spring, bull for Summer, and leopard for Autumn (Witts 2011: 151).

## Animals Pulling Chariots Containing Seasonal Imagery

As Hanfmann suggests in relation to such scenes generally, 'To represent the four Seasons, different animals must be used in each team, or the charioteers must have the usual attributes of Seasons' (1951: II, 161). In the case of the mosaics, not only are there four pairs of different animals but their chariots, or they themselves, carry seasonal symbols.

The Bacchus mosaic from Walramsneustrasse in Trier shows pairs of animals pulling chariots in the compartments between the full-length figures of female Seasons (4). Summer, Autumn and Winter are respectively approached by chariots drawn by lions, leopards and boars, whose chariots each contain a mask. Foliage and wheat are also depicted in the chariot drawn by the lions, and a beribboned staff and fruit in the chariot drawn by the leopards, while the chariot drawn by the boars lacks any produce. The lost figure of Spring (Hanfmann 1951: II no. 122; Abad Casal 1990a: no. 31) was associated with a chariot drawn by stags which is shown moving away from the compartment in which she was depicted. This chariot lacks a mask but contains flowers (?) and thin leaves. Hoffmann, Hupe and Goethert identify this Season as Summer and regard the Season approached by the lions as Spring, interpreting her attribute as a flower basket (1999: 159). This is, however, contradicted by the linear shapes in her basket which are more consistent with Summer's wheat, an interpretation followed by Abad Casal (1990a: no. 31).

Pairs of birds pulling chariots appear in the Dionysosmosaik from Cologne (5) although they are not prominent and the mosaic does not include depictions of the Seasons themselves. In a small compartment at upper right, a chariot pulled by purple gallinules (porphyrions) contains vines indicating Autumn, while in a comparable compartment at lower right a chariot pulled by birds usually described as parrots, but perhaps Indian ring-necked parakeets, contains a rake and sickle appropriate to Summer. The corresponding compartments on the other side of the mosaic are lost save for the remains of a wheel in one of them which confirms that the scheme was the same. Although the imagery in the chariots is clearly seasonal and gallinules appear as symbols of Autumn elsewhere, the parakeets are unusual and recall the Indian Triumph of Dionysos.

In the Bird Circus, also known as the Small Circus, at Piazza Armerina, chariots driven by young boys are drawn by four pairs of birds wearing seasonal plants around their necks (6). Winter, whose charioteer is being presented with a palm branch to indicate that he is the winner, is represented by doves (wood-pigeons) wearing a necklace of olives. Spring is represented by flamingos who wear roses, Summer by geese who wear ears of wheat, and Autumn by purple gallinules who each wear a bunch of grapes. These identifications are adopted by Parrish (1984: 28 n.77) but Abad Casal takes a slightly different view. He regards the flamingos as red geese representing Winter, and the doves as representing Spring (1990b: no. 217), but this is contradicted by the roses and olives respectively associated with these birds.

#### Animals in Scenes Associated with Personifications of Seasons

Only two panels survive of the mosaic of the Four Seasons from Carthage but each features a seasonal animal beside a seated female Season. One has a goat and was formerly identified as Autumn (Dunbabin 1978: 253 no. 42; Yacoub 1993: 56) but is now regarded as Spring (Parrish 1984: 120), her identity confirmed by the attribute of a swallow perched on a nearby pillar. The other, identified as Summer, has two partridges, one of which is pecking wheat (7).

In the beautiful and exceptionally interesting mosaic of Neptune and the Seasons from La Chebba, the full-length female Seasons in the corners are each flanked by a seasonal animal and an activity appropriate to the season in question (8). The Seasons are surrounded by sinuous vegetation: olives for Winter, roses for Spring, wheat for Summer and vines for Autumn. Winter, who carries two ducks as an attribute, is accompanied by a boar and a man collecting olives; Spring by a hound on a leash tied to one of the rose branches and a man collecting roses; Summer by a lion and a man harvesting wheat; and Autumn by a leopard and a man with baskets presumably containing grapes. In each case the vegetation around the Seasons matches that flanking the animals save for Winter's boar, which has reeds equally appropriate to the winter season and showing a sensitive appreciation of the animal's habitat.

A similar concept, although with thicker, denser, vegetation, is found in the mosaic of the Zodiac and Seasons from Haïdra (9). Seasonal *putti* in the corners are depicted within flowing scrolls of the same plants seen in the La Chebba mosaic, but they are flanked solely by pairs of birds: ducks with Winter, who carries more ducks as an attribute; peacocks with Spring; pheasants with Summer; and purple gallinules with Autumn.

The same basic design and vegetation were used in a mosaic which originally featured Tellus in the centre, of which two fragments are displayed in the National Museum of Carthage (10). One fragment depicts Winter as a warmly dressed young man surrounded by a scroll of olives, holding attributes of a duck and an olive branch. In the surviving volute immediately to the left is a duck. The second fragment shows parts of the volutes with roses and wheat. Pheasants appear with the roses and partridges with the wheat, respectively accompanying the lost figures of Spring and Summer.

## Animals in Separate Compartments Between the Seasons

The main part of the Allegorical Mosaic discovered at Écija in 2003 shows an enthroned figure thought to be Annus-Aion flanked by winged Victories (11) (Fig. 4). Winged *erotes* represent the Seasons in the corners, with further *erotes* between them symbolising Winds. Each Season is flanked by a quadruped and a pair of birds. The boar and ducks with Winter at top left are easy to recognise. At bottom right, Summer appears between a lion and a partridge with a bee-eater (Rueda Roigé - Lopez Ruiz 2011: 795). The Season at top right is lost along with his flanking animals. The remaining Season is flanked by a bull and a dove

Figure 4 Allegorical Mosaic, Écija. Photo: Dave Mill, courtesy of Museo Histórico Municipal de



with a swallow. These are appropriate animals for Spring and he is identified as such by Rueda Roigé and Lopez Ruiz who consider that there are flowers in his wreath, in the basket he holds, and in the larger basket in the compartment above him (2011: 794). Vargas Vázquez, López Monteagudo and García-Dils de la Vega, however, regard this Season as Autumn, identifying grapes instead of flowers (2017: 74). The contents of the large baskets above this figure and the lost figure diagonally opposite are not drawn with clarity. The greater use of colour in the basket above the lost Season could suggest flowers, making the identification as Spring an understandable one, but the putative flowers are far from certain and can plausibly be regarded as vine leaves and grapes. The presence of the bull and swallow on either side of the surviving Season indicate that he is the figure who must be Spring.

In a mosaic from Caerwent, the centre of which did not survive, female busts in the corners, now mostly lost, represented the Seasons, with animals in rectangular compartments at the sides (12) (Fig. 5). They can be identified as a boar on the left for Winter, a hound at the top for Spring, a lion on the right for Summer, and

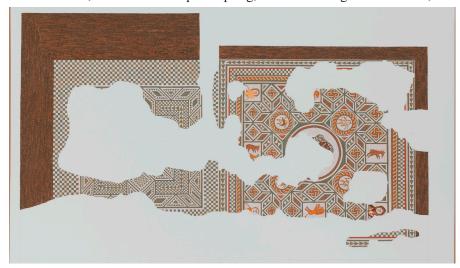
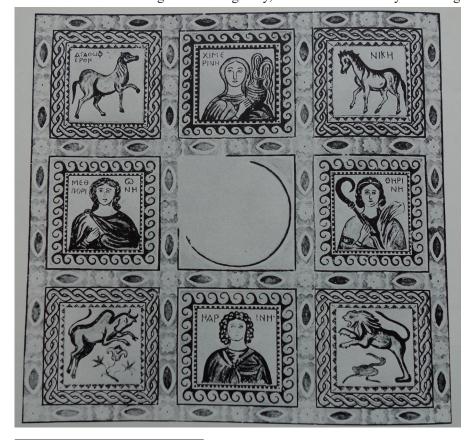


Figure 5 Painting by David Neal of the Seasons mosaic from Caerwent. © David S. Neal.

a hound hunting a hare at the bottom for Autumn (Witts 2011: 151-152; cf Neal 2005: 13, suggesting that the animal on the left is either a boar or another lion). The animals appear in chronological order but not next to the appropriate busts: Winter is at top right; Spring and Summer were at bottom left and bottom right respectively and were so similar that it was impossible to differentiate between them; and Autumn was presumed in the lost corner at top left. Like the Littlecote mosaic, there appear to be two separate sequences in this mosaic.

The mosaic from Church A at Dair Solaib, also known as Dar Soleib or Deires-Sleib, showed female busts of the Seasons in the middle of each side of a nine-square mosaic whose centre had been lost (13) (Fig. 6). They were named in Greek and shown with appropriate seasonal attributes but were not in sequence: Winter was at the top, Summer on the right, Spring at the bottom and Autumn on the left. A pair of horses occupied the top left and top right compartments, respectively labelled in Greek. The name of the horse at top left, 'AGATHOPHERON', perhaps means 'bringer of good things', while 'NIKE' ('victory'), is easily recognised.<sup>2</sup> A leaping bull for Spring at bottom left was complemented by a leaping lion for Summer at bottom right, the latter with a bird. Arguably the two horses also held seasonal as well as circus connotations. Caroline Mackenzie points out (pers. comm.) that the horses are not identical: the horse at top left is plumper and seems livelier than the horse at top right. If, as seems to be the case, the animals relate to the Season preceding them in a clockwise direction, the horse 'AGATHOPHERON' as bringer of good things would be appropriate for Autumn, while 'NIKE' perhaps alluded to victory over the winter season. It is notable, however, that both the seasonal busts and the animals are not arranged chronologically, with Summer directly following



2 Translations suggested by Caroline Mackenzie, to whom I am grateful for putting her knowledge of Classics at my disposal and discussing the inscriptions. I also thank her for useful observations about the horses and for discussing the out-of-sequence seasonal order.

Figure 6 Mosaic from Dair Solaib. After G. Hanfmann, The Season Sarcophagus in Dumbarton Oaks 1951 fig. 121 (after a drawing in Mélanges de l'Université Saint Joseph Beyrouth XXII (1939) pl. 14).

Winter. Perhaps the context within a church influenced how the mosaic was viewed.

The animals around Orpheus in the mosaic from Fôret de Brotonne are harder to interpret since most of the mosaic did not survive (14). They occupied rectangular compartments on the sides of the mosaic, separating the female busts of Seasons in the corners. The only complete Season and animal were Summer and an adjacent lion, but Darmon has recognised the hoofs of a stag and tail of a feline in other compartments. On this basis, he proposes that the lost animal – probably a boar – alluded to Winter and was at the bottom, with the lion for Summer on the right, a stag for Spring at the top, and a leopard for Autumn on the left (1994: 85-86). While these animals would match those found symbolising Seasons on other mosaics, the order is not chronological but has Spring and Summer reversed.

The mosaic depicting the Rape of Proserpina found at Rome in 1885 shows Winter at bottom left, Spring at top left, and Autumn at bottom right; Summer did not survive (15) (Fig. 7). The busts of the Seasons were separated by birds of which a duck and a peacock survive (Parrish 1984: 28 n.76). The duck was placed on the left between Winter and Spring, with the peacock at the top between Spring and the lost Summer (Jones 1926: 276-277 pl. 106), giving an appropriate seasonal placement in chronological order. The position of the birds has evidently since been reversed (see Blake 1936: pl. 9,4) and the reversal



Figure 7 Mosaic of Rape of Proserpina and Seasons from Rome, as displayed. © Roma, Sovrintendenza Capitolina ai Beni Culturali. Roma, Musei Capitolini, Centrale Montemartini, Archivio Fotografico Capitolino.

continues in the mosaic as currently displayed in Centrale Montemartini, with the peacock on the left and the duck at the top.

#### Animals Associated with Seasonal Plants

Four different animals in mosaics that do not include depictions of the Seasons can reasonably be interpreted as Seasonal if this is indicated by their association with appropriate plants. One of the clearest examples is a mosaic from El Jem showing Diana the huntress in the centre (16). Between the corner compartments with animal hunts are smaller roundels each with a bird. A duck at the bottom, representing Winter, is framed by olive branches; a partridge on the left, representing Summer, is framed by ears of wheat; a pheasant at the top, representing Autumn, is accompanied by a vine with large bunches of grapes; and a dove on the right, representing Spring, is flanked by roses. As Parrish notes, the birds are not shown in chronological sequence (1984: 187) but the presence of the distinctive products of the seasons confirms their significance.

The mosaic from the coincidentally-named Lion Walk in Colchester (17) has not been fully excavated but the design envisages four similar compartments generally accepted to have featured seasonal animals. The only animal uncovered to date is a lion interpreted by Smith as representing Summer because of its association with a basket (1984: 60-62). Although the contents of the basket are indistinct and were tentatively regarded by Smith as fruit and leaves, they include pointed shapes consistent with ears of wheat. The choice of grey-green tesserae rather than yellow is not indicative of foliage since the same colour was used to enliven the lion's mane. It is probable that the shade was chosen to make the wheat stand out from the basket and background (Witts 2016: 31).

The basket in the Colchester mosaic recalls those found with animals in a mosaic from Bavay known only from eighteenth-century records (18). The figures in the centre have been interpreted as Dionysos discovering Ariadne (Stern 1957: 73), while the corners show canthari or craters. The mosaic featured four quadrupeds all described as having a basket of flowers or fruit and shown with baskets sketched into a drawing, but in a more accomplished plate only three had baskets while the fourth was depicted in a leafy setting (Stern 1957: pls. XXXIXa and b). The baskets are not identical and the quadrupeds, while superficially similar to one another in the plate, are in different poses, suggesting that four species were intended. An early written description quoted by Biévelet (1956: 581) referred to: 'Les quatre côtés de cette pierre sont formés par quatre demi-cercles qui se joignent au centre, dans l'un desquels est représenté un tigre, dans l'autre un léopard, dans le troisième un sanglier and dans le quatrième un ours.' Another early description quoted by Hanoune (1976: 194) referred to 'un lion un elefent un sanglier et un leopard'. Precise identification is not wholly certain, but the animal on the right of the plate and drawing was depicted facing the viewer. This is a characteristic way in which lions are represented. The next animal, proceeding clockwise, is shown in the plate with a paw raised to touch the rim of the basket, which could suggest a leopard or tiger pawing at a basket of grapes. If these animals represented Summer and Autumn, they were in a clockwise sequence which would be completed by the boar for Winter, leaving the fourth animal to represent Spring. Hanoune suggests that the tiger and bear in the first account were mistaken for the lion and elephant in the second (1976: 196). As all animals had long tails in the drawing and plate except for the animal whose tail was obscured by the frontal pose, it seems likely that this was the animal regarded as a bear, a creature that does not have a long tail. I suggest that this was the lion in the second account, leaving Spring to be represented by the remaining tiger or leopard of the first account or the elephant of the second. As there is no evidence for an elephant in the visual records and another feline would be unexpected, perhaps a feline was confused with a canine. Possibly the fourth animal was a hound which would be consistent with symbols of Spring in other mosaics.

Birds appear in the lunettes around the central bust of Dionysos in the mosaic in Room D of the villa at Knossos (19) (Fig. 8). There are seasonal plants in the interspaces; in each case the plants occupy the interspace to the rear, and slightly above, the bird with which they are associated. The peacock for Spring on the right has roses, while the partridge for Summer at the bottom has ears of wheat. The purple gallinule on the left represents Autumn in other mosaics but is associated here with olive leaves. It appears, as Sweetman suggests (2013: 164), that the gallinule and olives represent Winter, with the gallinule standing for a watery Season. Sweetman tentatively identifies the bird at the top as a parrot, a plausible identification in view of its long, forked tail and green colouring (2013: 164) (cf Parrish 1984: 28 n.76 suggesting 'perhaps a wood-pigeon', followed by Abad Casal 1990b: no. 204, who identifies the purple gallinule as a quail). It is associated with a bunch of grapes appropriate for Autumn.

Figure 8 Dionysos Mosaic from Room D of the villa at Knossos. Photo: Iannis Papadakis, by courtesy of Sara Paton.



Part of the narthex pavement in the Large Basilica at Heraclea Lyncestis. Public Domain Source: Silfiriel, CC BY-SA 3.0 <a href="https://creativecommons.org/licenses/by-">https://creativecommons.org/licenses/by-</a> sa/3.0>, via Wikimedia Commons.

https://commons.wikimedia.org/wiki/ File:Mosaic in Heraclea Lyncestis.jpg

Figure 9

The narthex pavement in the Large Basilica at Heraclea Lyncestis has been thoroughly studied by a number of scholars, most recently by Ruth Kolarik (20) (Figs. 9-10). Unlike the other mosaics in this article, the Heraclea pavement shows six different animals: a goat, bull, lion, an animal that is mostly lost (probably a boar), a red dog tied to a tree, and a leopard which is depicted attacking a deer, all associated with trees appropriate to the season (Kolarik 2011: 139). Kolarik convincingly argues that the first three animals relate to Spring and Summer, replicating the zodiac signs of Aries (albeit with a goat rather than ram), Taurus and Leo. She points out how they adopt the poses seen in the constellations (2011: 138-139). The remaining three animals, which were





Figure 10 Part of the narthex pavement in the Large Basilica at Heraclea Lyncestis. Public Domain Source: Rašo, CC BY-SA 3.0 <a href="https://creativecommons.org/licenses/by-">https://creativecommons.org/licenses/by-</a> sa/3.0>, via Wikimedia Commons. https:// commons.wikimedia.org/wiki/File:Mozaici vo Heraclea Lyncestis 14.JPG

placed on the other side of the central motif, related to Winter and Autumn, with the putative boar and leopard traditionally associated with these Seasons. They are separated by the unique red dog, which Kolarik links with the constellation of Canis Major, associated with late summer/early autumn and including Sirius, the dog star and the brightest star in the heavens (2011: 140). The order is therefore chronological from left to right for the first three animals but reversed for the fourth and sixth, with the dog placed somewhat curiously between the animals for Winter and Autumn.

A mosaic from the House of Lycurgus and Ambrosia at Aquileia depicts Lycurgus and Ambrosia in the central hexagon surrounded by six other hexagons (Fig. 11). Oceanus appears in the one above and Tethys in the one below. At lower left is a boar between reeds for Winter; at upper left a bull associated with flowers for Spring (Fig. 12); and at upper right a lion with a garland of wheat for Summer (Fig. 13); the fourth animal did not survive (21).



Mosaic from the House of Lycurgus and Ambrosia at Aquileia. After L. Bertacchi, Da Aquileia a Venezia 1980 fig. 138. [In this photograph, the central scene is viewed from the right.]



Detail of the bull in the mosaic from the House of Lycurgus and Ambrosia at Aquileia. Photo: Museo archeologico nazionale di Aquileia, published with the authorization of Ministry of Culture (ITA), Regional Directorate of Museums of Friuli Venezia Giulia and preserved in the Archive of the National Archeological Museum of Aquileia (Ud).

#### Figure 13

Detail of the lion in the mosaic from the House of Lycurgus and Ambrosia at Aquileia. Photo: Museo archeologico nazionale di Aquileia, published with the authorization of Ministry of Culture (ITA), Regional Directorate of Museums of Friuli Venezia Giulia and preserved in the Archive of the National Archeological Museum of Aquileia (Ud).

Figure 14 Mosaic of the child Dionysos from El Jem. Photo: Patricia Witts, © INP-Tunis.

## Seasonal Animals with No Other Seasonal Imagery

The animals in roundels at the corners of the mosaic showing the procession of the child Dionysos from El Jem are widely accepted as symbolising the Seasons although the figures of the Seasons themselves do not appear, nor are there any other indications of seasonal imagery (22) (Fig. 14). At top right is a boar for Winter, at bottom left a lion for Summer and at top left a leopard for Autumn; the animal for Spring at bottom right did not survive.



The main compartment of a mosaic found at Chania in 1977 shows Dionysos discovering Ariadne (23). Placed in spaces between the interlaced squares containing the mythological scene and the surrounding foliate wreath are four masks and four animals: a stag at lower right for Winter, a bull at lower left for Spring, a lion at upper left for Summer and a tiger at upper right for Autumn. Three surviving pairs of birds of different species flank winged figures in the spandrels and these also appear to be seasonal, albeit in a separate sequence: although hard to make out in the published photographs, they resemble doves for Spring at upper left, partridges for Summer at upper right and pheasants for Autumn at lower right.

Although the association is less clear, it is possible that the birds in the late mosaic of Theodoulos from Sousse might similarly have carried seasonal connotations (Parrish 1984: 67, 255-256) (24). Four pairs of birds flank a centrally placed crater from which a date palm and vine scrolls are growing. The overall theme appears to be fruitfulness. The prominent bunches of grapes and dates are appropriate for Autumn but there is no foliage linked to the other seasons. Nevertheless, the birds are carefully and symmetrically arranged. They follow the chronological order of the seasons from top to bottom: pheasants for Autumn, ducks for Winter, peacocks for Spring, and partridges for Summer. All are birds that appear as symbols of those Seasons elsewhere, and it is notable in the context of this mosaic that Autumn, the season of fruitfulness, appears at the top.

## Uncertain or Disputed Examples of Seasonal Animals

The mosaic of Africa and the Seasons at El Jem shows the personification of Africa in a large square compartment in the centre, with female busts of Seasons in the corners in an anti-clockwise sequence starting with Winter at top left (A). In the centre of each side is a small bird with a seasonal plant appropriate to the Season after which it is placed: olives for Winter, a flower for Spring, an ear of wheat for Summer, and grapes for Autumn. While the seasonal nature of the mosaic is clear, it is uncertain whether the birds were intended to represent the individual Seasons: they are similar to one another but not identical, and were perhaps not meant to be specific, identifiable birds. It is notable that they do not seem to include the birds commonly associated with Seasons elsewhere.<sup>3</sup>

Rueda Roigé suggests that the animals in the semicircular compartments of the Bacchus mosaic from Calle de Cruz Conde at Cordoba are Seasonal (2011: 167) (B). The mosaic contained busts of the Seasons in the corners and animals in the centre of each side, which Rueda Roigé identifies as a duck for Winter, a peacock for Spring (cf Blazquez 1981: 30, a heron), and a bull for Summer (2011: fig. 10). While the duck, peacock and bull appear as symbols of such Seasons in other mosaics, it would be unusual, although not unique, for seasonal symbols to comprise a mixture of quadrupeds and birds (cf the Four Seasons mosaic from Carthage (7), a different design in which the animals share the same space as the Season they accompany). In the Cordoba mosaic, the bull not only has a seasonally appropriate basket of wheat but also a trident which it is holding in an upraised front hoof, and the fourth animal appears to be a second bull. These factors distinguish the mosaic from traditional representations of seasonal animals. While seasonal allusions are evident, the symbolism of the four animals is uncertain and perhaps carried a more complex message.

<sup>3</sup> I am grateful to Stephen Cosh for discussing the birds on this mosaic.

A mosaic from the Villa of Awza'i shows Ge surrounded by four animals accepted as seasonal by Abad Casal (1990b: no. 211) (C). At upper left is a bull, at lower left is a leopard identified by its spots, and at lower right is a lion identified by its mane. These animals could represent Spring, Autumn and Summer, although not in chronological sequence, but the fourth animal is problematic. Its surviving foreparts indicate another feline identified by Abad Casal as a tiger which he associates with Winter. This would be an exceptional seasonal association. By comparison with the feline at upper right in the mosaic of Leontius from the same site (Chéhab 1957-1959: pl. LXXXVII), the apparent 'stripes' of the tiger could represent shading of the animal's body. It is possible that this figure represents a lioness and that the animals were not intended to carry seasonal allusions. It is easier to argue a seasonal significance for the animals in the mosaic of Leontius as it shows a bull and lion (or lioness) - animals that commonly represent Spring and Summer elsewhere – with a bear and hare. The bear's winter hibernation and the hare's association with the grape harvest could suggest Winter and Autumn but I exclude this mosaic because the symbolism of the bear and hare is not traditional and the significance of these animals is uncertain.

The mosaic found at Clos de la Tour, Fréjus, featured animals that appear as symbols of Seasons elsewhere, but the main subject of the mosaic suggests that this is not their significance here (D). The stag (Lavagne 2000: 344, gazelle), bull, lion and leopard respectively represent Winter, Spring, Summer and Autumn in other mosaics and are accepted as possibly seasonal here by Abad Casal (1990b: no. 209). They are disposed in the correct chronological sequence anti-clockwise but are all in poses more suited to the amphitheatre: the stag is running, the bull has its head lowered, and the lion and leopard are leaping. The animal-combat theme is made explicit in the central compartment, which shows two confronted cocks with a palm branch above and a crater or cantharus below. Lavagne, who has written the volume of Recueil Général des Mosaïques de la Gaule that includes this mosaic, does not mention any seasonal allusions. Instead, he concludes that: 'Les quatre animaux sauvages évoquent des combat de fauves (venationes) dans l'amphithéâtre, peut-être pour souligner la férocité du combat de coqs qui pourrait avoir été donné par le commanditaire de la mosaïque' (2000: 345).

Noting that the animals in the Rudston Venus mosaic are the same as those depicted at Fréjus, and also bearing in mind the Saint-Romain-en-Gal and Trier mosaics above ((1) and (2)), Smith suggested that 'it seems at least possible ... that the animals of Rudston were specifically chosen as symbols of the Seasons' (1980: 135; contra Witts 2011: 149-150) (E) (Fig. 15). This theory is supported by Darmon who has referred to them as beasts of the amphitheatre 'symbolisant les Saisons' (2003: 305; 2005: 309). Around the figure of Venus in the centre, the stag appears on the left, the leopard at the top, the bull on the right, and the lion at the bottom. This order does not follow the chronological sequence of seasons and the beasts are clearly shown in the context of the amphitheatre. It is particularly notable that the lion has been penetrated by a spear; the mosaic includes bestiarii and amphitheatre accoutrements; and two of the animals are accompanied by inscriptions apparently referring to their stage names (discussed in Witts 2016: 32, with references). The amphitheatre link is unprecedented in any of the other mosaics in this study save only for the mosaic from El Jem (F) discussed below, where a seasonal interpretation is also rejected. A better comparison is the mosaic of gladiators and wild beasts from Reims, which includes the same animals as appear at Rudston including some that have been speared (Stern 1957: 33-35 no. 38 pls XI-XIV). While hunting animals in the wild can carry

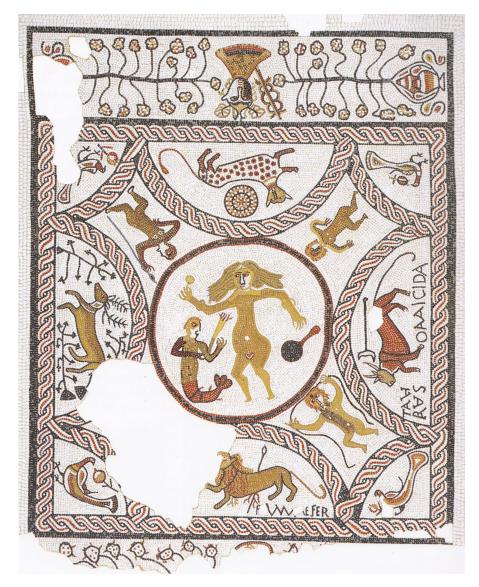


Figure 15 Painting by David Neal of the Venus mosaic from Rudston. © David S. Neal.

seasonal associations, as it does most markedly in the paintings in the Tomb of the Nasonii, the artificial setting of the arena changes the interpretation placed upon animals in amphitheatre scenes. Hunted animals are akin to crops, being natural products generally used for food so that the pleasure of the pursuit is not the only purpose served by the hunt. Neither the Fréjus, Rudston nor El Jem mosaics features personifications of the Seasons themselves or any conventional seasonal imagery, and any link between the animals and seasons is unproven.

Ennaïfer suggests that the four animals ranged along one side of the xenia mosaic from El Jem, now in The Bardo, symbolise the Seasons (1995: 72) (F). They are placed in a row beneath the well-known scene of dice players and comprise confronted pairs of leopard with lion and bull with bear, each animal being encircled by a millet stalk. Arguably these animals relate simply to the amphitheatre (Dunbabin 1978: 260 no. 28), with the game of chance above them reflecting the risks inherent in combats in that setting. This is the antithesis of the predictability of the seasonal cycle.

The final mosaic to discuss in this survey is the Atrium pavement from Basilica A at Ayios Yeoryios in Cyprus, whose animals Abad Casal includes in his list of Seasonal beasts (1990b: no. 212) (G). The mosaic lacks any seasonal imagery but simply shows confronted pairs of animals: a boar with a bear, and a lion

with a humped zebu, ox or bull (Daszewski and Michaelides 1988: 94, bull; Michaelides 1992: 99, zebu or ox). Although the boar and lion appear as symbols of Winter and Summer in many of the mosaics discussed in this article, and the fourth animal could be interpreted as a bull linking it to Spring, the bear does not feature at all. Daszewski and Michaelides suggest that the animals 'ultimately derive from the hunting scenes of North Africa' (1988: 94). There is nothing in the context of this mosaic to suggest a seasonal connotation.

#### Conclusions

The geographical spread of the mosaics with seasonal animals shows that they were popular throughout the Roman Empire, especially in North Africa.

In most cases four different species were shown, making it less likely that there is a seasonal significance if more than four appear. For instance, the leopard, lion and boar on the side of basin in a mosaic from Sousse are interpreted as beasts of the amphitheatre (Dunbabin 1978: 269 no. 7; cf Steer 2003: 371 fig. 3, regarding them as representing the Seasons) although they are animals that, in other contexts, often represent the Seasons; the presence of other animals in this mosaic undermines any seasonal connection. In the special case of Heraclea Lynkestis (20), however, there were six seasonal species but at Dair Solaib (13) only three (plus a bird shown beneath the leaping lion). It is perhaps significant that these were late mosaics found in ecclesiastical contexts.

The seasonal animals were most frequently depicted as single examples representing each season, but pairs of the same species were sometimes used, especially if they were birds. As well as a pair of ducks, the recent discovery at Écija (11) is noteworthy for including at least two dissimilar pairs: a partridge with a bee-eater and a dove with a swallow. The Dair Solaib mosaic (13) is a special case, not only for the repetition of an animal, but because the creatures in question are horses which do not feature in the other mosaics discussed in this article. They make explicit a link with the circus, seen also in the mosaic from Piazza Armerina (6).

Duplication of a particular animal, while unusual in mosaics depicting the Seasons, is not unknown in other media. For instance, the situla found at Tourdan, near Vienne, and now in the British Museum, shows figures of the Seasons reclining on a boar and a bull, interspersed with two felines conventionally described as panthers but probably to be identified as lionesses<sup>4</sup> (Hanfmann 1951: II, 145 no. 105 fig. 106; Parrish 1984: 27 n.67; Painter 1989: 224-225 no. 183; Abad Casal 1990a: no. 86; Abad Casal 1990b: no. 214; https://www.britishmuseum. org/collection/object/G 1859-0321-1, accessed 14 January 2022). Walters has suggested that the resting boar and bull could symbolise the stationary position of the sun at the Summer and Winter Solstices, while the moving panthers could indicate the equinoxes (1921: 20 no. 74 pls. X-XI).

The seasonal animals appear most often in mosaics either entirely devoted to the Seasons or whose main imagery related to time. These range from the straightforward Four Seasons mosaic at Carthage (7) to the mosaics with Aion from Haïdra (9) and Écija (11). The zodiac, along with months, also featured at Trier in a mosaic in which the Muses and Greek and Latin authors were prominent (2). Constellations are shown at Heraclea (20), while on a more down

<sup>&#</sup>x27;Panther' is a generic term often used to describe large felines (discussed in Witts 2016: 11) but it is usually possible to be precise. Those shown on the Tourdan situla lack the spots or stripes that would indicate a leopard or tiger, but have a ruff of fur around the neck consistent with a lioness. The presence of teats confirms that they are female.

to earth level the mosaic from Saint-Romain-en-Gal featured the animals at the centre of a series of scenes showing seasonal activities (1).

Where the seasonal animals surround a deity, they frequently appear with Dionysos/Bacchus, who was the leader of the Seasons. Examples include mosaics from Trier (4), Cologne (5), Bavay (18), Knossos (19), El Jem (22) and Chania (23), along with characters associated with Bacchic myth – Lycurgus and Ambrosia – from Aquileia (21). Neptune is prominent in the La Chebba mosaic (8), and Diana the huntress is the main subject at El Jem (16), with the seasonal birds representing species hunted during the season in question (Parrish 1984: 188). The Orpheus mosaics from Littlecote (3) and Fôret de Brotonne (14) included animals that not only formed Orpheus's audience but also represented the Seasons.

Unsurprisingly, mosaics alluding to the earth and to fruitfulness included seasonal animals – Carthage (10) and the tomb mosaic from Sousse (24) – but such animals are more evident in fairly complex designs. One direction for future research is to study mosaics in which numerous animals appear to form purely decorative elements to see whether or not any subtle seasonal links are apparent. However, just because certain animals were favoured in Seasons mosaics, it does not automatically mean that the animals represented the Seasons as such. For instance, the Lord Julius mosaic from Carthage includes a number of attractive animals appearing as attributes or as part of seasonal activities in three of the seasonal scenes rather than representing the Seasons themselves (Dunbabin 1978: 119-120, 252 no. 32 pl. 109; Dunbabin 1999:118-119 fig. 122; Abad Casal 1990b: no. 191). Parrish explains that in this mosaic the seasons are not sequential, with Winter and Summer at the top and Spring and Autumn at the bottom, the latter seasons being those when aristocrats left the city and visited their estates (1984: 22 n.38, 55-56, 111-113 no. 9 pls. 15-16).

## Chronological Sequence and Starting Point

Where the chronological sequence of the seasonal animals is known, there was a preference for a clockwise arrangement, with 10 examples ((1), (3), (4), (9), (12), (15), (18), (21), (22), (23)) as opposed to five for anti-clockwise ((2), (5), (6), (8), (11)).

Traditionally the seasonal cycle started with Winter (Ovid, *Fasti* I, 145; Julian *Orationes* IV (*Hymn to King Helios*), 156A). Assuming the imagery in the central compartment of the mosaic was viewed from the correct direction, and starting with the animal for Winter, there was a clear preference for the seasonal sequence to start on the left, with 12 examples ((1)-(5), (8)-(9), (11)-(12), (15), (18) and (21)), as opposed to two starting on the right ((6), (22)).

The sequences of female and animal Seasons are distinct from each other in the Littlecote (3) and Caerwent (12) mosaics. Similarly, the chronological orders of the quadrupeds and birds in the Chania mosaic (23) do not seem to be aligned.

#### The Animals

The various quadrupeds in this study are set out in Table 1. Of those that survive, the lion occurs in the greatest number of mosaics, with 14 examples from 13 mosaics. Next are leopards/tigers along with their female equivalents, which account for 11 examples from 10 mosaics. There are seven bulls from seven mosaics, and potentially at least ten boars from nine mosaics. The other species appear far less frequently. The traditional seasonal beasts of boar, bull, lion and leopard/tiger account for some three-quarters of all the animals in this study.

Table 2 assesses the quadrupeds by the Season to which they were assigned. It shows that the boar, bull, lion and leopard/tiger were not only the most commonly used, but that they appeared almost exclusively as symbols of Winter, Spring, Summer and Autumn respectively. At Littlecote (3), the bull unusually symbolises Summer, but this recalls the bull at Heraclea (20) which perhaps represented late Spring, since the goat also appearing in this mosaic was typically associated with the beginning of Spring (Kolarik 2011: 139). The inclusion of the bull at Littlecote apparently as a symbol of Summer might be explained by the first day of summer being when the sun is in Taurus (Varro, Rerum Rusticarum I, XXVIII).

The use of birds was more varied although some patterns can be observed from Table 3. The partridge is the most common, appearing ten times in seven mosaics. The duck appeared as a seasonal symbol potentially ten times in six mosaics and in many more as an attribute, and the pheasant potentially eight times in five mosaics. There were seven purple gallinules in four mosaics, and six peacocks in four.

Table 4 assesses the birds by the Season to which they were assigned. It shows that most birds were associated mainly or exclusively with a single season, such as the duck with Winter, the peacock with Spring, and the partridge with Summer.

Several factors link the various animals and birds with the seasons in question, most of which have been discussed by Parrish and Kolarik (Parrish 1984: esp. 26-40, 56; Kolarik 2011). For the main quadrupeds, the bull for Spring and the lion for Summer are drawn directly from the zodiac. The leopard/tiger for Autumn is associated with Dionysos, the protective deity of the grape harvest. The boar is associated with Winter because that is the season in which it was hunted (Horace, Epode II, 29-33, noted by Parrish 1984: 2, n.62, 31). The deer hunt was also a winter activity (Virgil, Georgics I, 307-309) but could take place in the Spring, as indicated by the scenes in the Tomb of the Nasonii (Parrish 1984: 56 n.226; Abad Casal 1990a: no. 42). The goat was traditionally associated with Spring (Parrish 1984: 26, 31, 35). It was the time when goats led sheep to their pastures and the goat was regarded along with the swallow as an indication of this season (Kolarik 2011: 139, quoting the Calendar of 354; for this, see Stern 1953: esp. pls. VIII,2, XVI,2 and XVIII,1; Parrish 1992: no. 17). Kolarik notes an association between the hound and shepherds in the spring (2011: 141). This perhaps explains the use of hounds as a symbol of Spring on several of the mosaics, with the special case of the Heraclea hound having a link with a constellation (2011: 140). The hare hunt was an autumn or winter activity, the hare being particularly related to autumn as scavenger of the vine (Parrish 1984: 33, 37, 39).

For the birds, the association of ducks with Winter and partridges with Summer is explained by these being the seasons in which they were hunted (Parrish 1984: 27, 31, 33; Parrish 1995: 174), while the peacock is symbolic of the renewal of nature in the Spring (Parrish 1995: 174, 176). The other notable seasonal link in this study is the purple gallinule which appears almost exclusively as representing Autumn. A paper discussing the habits of this water-bird explains that the gallinule settles in and nests in the autumn, as soon as marshlands become wet after drying out in summer (Vielliard undated: 231).

It is evident that the quadrupeds appearing less often – deer, goat, hare, horse, hound – are gentle and/or domesticated animals. Those with the traditional association with specific Seasons - boar, bull, lion, leopard/tiger - are more dangerous beasts. As well as indulging in hunting and keeping birds such as peacocks and gallinules, the patrons who commissioned the mosaics might well also have kept the more unusual birds such as the parakeet and flamingo. Personal familiarity and preference could easily have played a part in the choice of species that appear infrequently in seasonal contexts.

The animals in this study, often relatively small and easily overlooked, not only enliven the mosaics in question but play a far more than decorative role: they link the pavements to the heavens as well as earth, recalling constellations and earthly pursuits as well as the reassuring repetition of the seasonal cycle.

### Catalogue

#### (1) Calendar Mosaic from Saint-Romain-en-Gal

Boar, bull, lion, tigress, clockwise from bottom left. Personifications of the Seasons riding the animals. Depictions of seasonal activities.

Hanfmann 1951: II no. 303

Smith 1980: 135

Lancha 1981: 208-225, no. 368, esp. 210-211 pls. CVIII-CXI

Parrish 1984: 25, 27 n.67 pl. 103

Abad Casal 1990a: no. 80 Abad Casal 1990b: no. 57 Dunbabin 1999: 76 fig. 79

Dunouom 1999. 70 mg.

Steer 2003: 369

Balmelle and Darmon 2017: 186 figs. 239-242

# (2) Monnus-Mosaik from Trier

AVTVMNVS rides a leopardess at top right; other ridden Seasons lost apart from trace of putto, evidently Summer from adjacent imagery. Sequence presumed to be anti-clockwise from top left. Personifications of the months, zodiac, Muses and authors.

Hanfmann 1951: II no. 304

Parlasca 1959: 41-43 pls. 42,1, 43-47

Smith 1980: 135

Abad Casal 1990b: no. 58

Hoffmann, Hupe and Goethert 1999: 138-141 No. 103 pls. 64-65, 68-69

Balmelle and Darmon 2017: 199 fig. 249

#### (3) Orpheus mosaic from Littlecote

Deer, goat, bull, leopard clockwise from bottom left, with personifications of Seasons around Orpheus.

Lysons 1813-1817: I.IV, 4 pl. IX

Hanfmann 1951: II no. 104

Smith 1977: 150, no. 139 pl. 6.XXIa

Toynbee 1981: 1-5 pl. 1

Walters 1984: 435-437 figs. 1-3

Abad Casal 1990a: no. 57

Cosh - Neal 2005: 351-355 Mosaic 248.1 figs. 371-374

Witts 2011: 150-151 fig. 5

Witts 2016: esp. 137, 181-182 no. 92 figs. 7, 72, 83, 94

### (4) Bacchus mosaic from Walramsneustrasse, Trier

Boars, stags, lions, leopards, clockwise from centre left, around Bacchus in chariot drawn by tigers, with personifications of Seasons in corners.

Hanfmann 1951: II nos 122 and 299

Parlasca 1959: 40 pls. 40-41

Parrish 1984: 27 n.67

Abad Casal 1990a: no. 31

Hoffmann - Hupe - Goethert 1999: 158-160 No. 144 pls. 88-90

Balmelle - Darmon 2017: 142 fig. 171

#### (5) Dionysosmosaik from Cologne

Surviving chariots drawn by parakeets and purple gallinules in small compartments in a Dionysiac mosaic: drunken Dionysos with satyr; satyrs, maenads, Pan, Silenus; large baskets/craters with fruit; quadrupeds and birds. Anti-clockwise, presumably starting top left.

Parlasca 1959: 78 pls. 66, 75,1, 77,1

Parrish 1984: 28 n.76

Abad Casal 1990b: no. 216 Dunbabin 1999: 81 fig. 83

https://roemisch-germanisches-museum.de/Permanent-Exhibition(accessed 10.09.22; second image under third heading 'View pictures')

#### (6) Bird Circus at Piazza Armerina

Doves, flamingos, geese, purple gallinules, anti-clockwise from bottom right, around spina.

Carandini – Ricci - de Vos 1982: 76, 282 colour pl. XLI

Parrish 1984: 28

Abad Casal 1990b: no. 217

Steger 2017: 16 fig. 7

https://villaromana.mused.org/items/9322/vestibolo-del-piccolo-circo-vestibule-of-the-small-circus (accessed 10.09.22)

## (7) Mosaic of the Four Seasons from Carthage

Two surviving panels, personifications of Seasons respectively with goat and partridges.

Dunbabin 1978: 120, 253, Carthage no. 42

Parrish 1984: 26, 27, 120-122 no. 12 pls. 20-21

Abad Casal 1990a: no. 102 Yacoub 1993: 56 fig. 50

#### (8) Mosaic of Neptune and the Seasons from La Chebba

Boar, hound, lion, leopard, anti-clockwise from centre left, around Neptune, with personifications of Seasons in corners.

Hanfmann 1951: II, nos 118 and 445

Dunbabin 1978: 20, 110, 254, La Chebba 1, pls. 97-98

Parrish 1984: 25, 26, 27, 201-204 no. 49 pls 66b-68

Abad Casal 1990a: no. 29

Abad Casal 1990b: no. 192

Yacoub 1993: 134 fig. 98

Parrish 1995: 170 fig. 4

Slim 1995b: 56-57, 134 figs. 22-24, 29, 33-34, 90

Dunbabin 1999: 111-112 fig. 114

Vollkommer 2001: 215-216 figs. 1-9

Steer 2003: esp. 368-369 figs. 1-2

Kolarik 2011: 140 fig. 4 colour pl. V

## (9) Mosaic of Zodiac and Seasons from Haïdra

Ducks, peacocks, pheasants, purple gallinules, clockwise from top left, around Aion holding the circle of the zodiac, with personifications of Seasons in corners.

Dunbabin 1978: 158, 261, Haïdra 1, pl. 155

Parrish 1984: 27, 47, 190-193 no. 44 pls. 59b-61a

Abad Casal 1990b: nos 85 and 205

Parrish 1995: esp. 170, 174, 176 fig. 1

Steer 2003: 373 fig. 4

https://www.un.org/ungifts/content/mosaic-four-seasons (accessed 10.09.22)

#### (10) Tellus Mosaic from Carthage

Duck(s), pheasants, partridges, anti-clockwise around Tellus, with personifications of Seasons in corners.

Dunbabin 1978: 254, Carthage no. 46

Parrish 1984: 27, 122- 125 no. 13 pls. 22-23

Abad Casal 1990b: nos 134, 194

Parrish 1995: 176 fig. 8

## (11) Allegorical Mosaic from Écija

Boar and ducks, bull and dove with swallow, lion and partridge with bee-eater, anti-clockwise from top left around Aion with winged Victories in centre; the animals flank personifications of Seasons in corners.

López Ruiz 2005: esp. 308, 310 fig. 3 pls. I, V

Rueda Roigé - Lopez Ruiz 2011: 791-796, Mosaic 1 figs. 1-8

Vargas Vázquez - López Monteagudo - García-Dils de la Vega 2017: 73-75, Mosaic 32 fig.64

#### (12) Seasons mosaic from Caerwent

Boar, hound, lion, hound hunting hare, clockwise from centre left, with busts of Seasons in corners.

Neal 2005: 12-14

Witts 2011: 151-152 figs. 6-10

Cosh - Neal 2010: 359-364, Mosaic 483.30 figs 367-368 Witts 2016: esp. 137, 157-158 no. 25 figs. 22, 49-50, 99

#### (13) Mosaic from Church A at Dair Solaib

Horse, bull, lion, horse, not in chronological sequence.

Hanfmann 1951: I, 162; II no. 192 fig. 121

Decriaud 2011: 312, no. 12 fig. 12 [Deir-es-Sleib]

#### (14) Orpheus mosaic from Fôret de Brotonne

Lion plus traces of stag and feline, not in chronological order, around Orpheus.

Hanfmann 1951: II no. 168

Darmon 1994: 85-86 no. 875 pls. LI-LX

## (15) Rape of Proserpina and Seasons from Rome

Surviving duck and peacock, clockwise from centre left originally, between busts of Seasons.

Jones 1926: 276-277 pl. 106

Blake 1936: 131, 180 pls. 9,4, 45,4

Parrish 1984: 28 n.76

### (16) Mosaic of Diana the Huntress from El Jem

Duck, partridge, pheasant, dove, not in chronological sequence, around Diana. In corners, animal hunts.

Dunbabin 1978: 261, El Djem no. 31

Parrish 1984: 27, 56, 186-188 no. 41 pl. 58

Abad Casal 1990b: no. 203 Yacoub 1993: 273 fig. 201

Ghedini 1994: 256

### (17) Mosaic from Lion Walk, Colchester

Lion with basket of wheat; rest of mosaic unexcavated.

Smith 1984: 57-62 figs. 48-49

Neal - Cosh 2009: 122-123, Mosaic 291.52 fig. 78

Witts 2011: 152-153 fig. 11

Witts 2016: esp. 31, 137, 164-165 no. 43 fig. 25

#### (18) Mosaic of Dionysos discovering Ariadne from Bavay

Boar, ? hound, lion, leopard or tiger, clockwise from centre left, around scene of Dionysos discovering Ariadne.

Biévelet 1943: 168 fig. 6

Biévelet 1956: 581 pl. XIII fig. 6

Stern 1957: 73-74 no. 109 pls XXXIXa and b

Hanoune 1976: 191-201 fig. 1

## (19) Mosaic of Dionysos from Room D, Villa at Knossos

Purple gallinule, ? parrot, peacock and partridge, not in chronological sequence, around bust of Dionysos.

Payne 1935: 164 pl. XI,2

Hanfmann 1951: II no. 219

Sanders 1982: 51-53 pl. 13 (not including the birds)

Parrish 1984: 28 n.76

Abad Casal 1990a: no. 114 Abad Casal 1990b: no. 204

Sweetman 2013: 162-164, Mosaic 3 pl. 3 colour pl. 2

## (20) Mosaic from the Large Basilica at Heraclea Lyncestis

Linear arrangement of goat, bull, lion, boar (?), red dog, leopard attacking deer.

Tomašević 1975: 389-390 pls. CLXXXIVb and CLXXXV

Maguire 1987: esp. 36-40 figs. 42-47 Kolarik 2011: 137-146 incl. figs. 1-2, 5

## (21) Mosaic in House of Lycurgus and Ambrosia at Aquileia

Boar, bull, lion, fourth animal lost, clockwise from lower left, around hexagon with depictions of Lycurgus and Ambrosia, with Oceanus above and Tethys below.

Bertacchi 1964: 258 pl. 7

Bertacchi 1980: 165-166, colour pls 137-138

Abad Casal 1990b: no. 210

## (22) Mosaic showing procession of the Child Dionysos from El Jem

Boar, second animal lost, lion, leopard, clockwise from top right, around child Dionysos riding tigress and accompanied by maenad and satyr.

Foucher 1963: 104 pl. XXb

Dunbabin 1978: 176, 186, 261, El Djem no. 32 pl. 177

Parrish 1984: 26, 44, 182-184 no. 39 pl. 57a

Slim 1995c: 96-97 fig. 59

Steer 2003: 371

#### (23) Mosaic of Dionysos discovering Ariadne from Chania

Stag, bull, lion, tiger, clockwise from lower right, in spaces between the central interlaced squares and the enclosing roundel; the interlaced squares contain a scene of Dionysos and Ariadne.

Markoulaki 2011: 58 incl. fig. [printed in reverse]

Sweetman 2013: 241-244, Mosaic 135 pl. 40 colour pl. 9

## (24) Mosaic of Theodoulos from Sousse

Linear from top to bottom, pairs of pheasants, ducks, peacocks, partridges on either side of central date palm and vine scrolls.

Dunbabin 1978: 169, n. 174, 193, n. 29, colour pl. F. tomb mosaic

Parrish 1984: 67, 254-256 no. 75 pl. 101b

Uncertain or not seasonal

## (A) Mosaic of Africa and Seasons from El Jem

Small birds associated with seasonal plants between busts of Seasons around personification of Africa.

Slim 1995a: 18-22 figs. 1-3

### (B) Mosaic of Bacchus and the Seasons from Cordoba

Duck, peacock, bull with trident, second bull, in mosaic of Bacchus and busts of Seasons.

Blazquez 1981: 29-30 figs 13-16 Rueda Roigé 2011: 167 fig. 10

#### (C) Mosaic of Ge from Villa of Awza'i

Tiger or lioness, bull, lion, leopard, around bust of Ge.

Chéhab 1957-1959: 128-129 pl. LXXXIX

Balty 1995: 132

Abad Casal 1990b: no. 211

## (D) Mosaic of cock fight from Clos de la Tour, Fréjus

Stag, bull, lion, leopard in active poses. In centre, confronted cocks with palm branch and cantharus or crater.

Février 1975: 298 pl. CXXX

Smith 1980: 135

Abad Casal 1990b: no. 209

Lavagne 2000: 344-345 no. 965 pls. CXVI-CXVII

#### (E) Venus mosaic from Rudston

Stag, leopard, bull, lion, around Venus, with bestiarii and amphitheatre objects.

Smith 1980: 134-136 pls. XIb-XII

Dunbabin 1999: 98-99 fig. 99

Neal and Cosh 2002: 353-356, Mosaic 143.2 figs. 325-327

Darmon 2003: 305 Darmon 2005: 309 Smith 2005: 9-13 fig. 3

Witts 2011: 149-150 figs 1-4 colour pl. VI

Witts 2016: esp. 32-33, 137, 190 no. 115 figs. 11, 27, 76, 97

## (F) Xenia mosaic from El Jem

Leopard and lion confronted, bull and bear confronted, each encircled with millet, in mosaic with many xenia items, in row immediately below rare scene of dice players.

Dunbabin 1978: 125, 170, 260, El Djem no. 28 pl. 118

Yacoub 1993: 138 fig. 105

Ennaïfer 1995: 72

(G) Atrium mosaic at Ayios Yeoryios, Peyia

Boar and bear confronted, lion and ox/zebu confronted.

Daszewski and Michaelides 1988: 94-95 fig. 9

Michaelides 1992: 99, figs 56, 56a, 56b

Abad Casal 1990b: no. 212

Table 1 - Quadrupeds as Seasonal Animals, Listed by Quadruped

Mosaic	Boar	Bull	Deer (Stag/ Hind)	Goat	Hare hunt	Horse	Hound	Leopard/ Leopardess/ Tiger/Tigress	Lion
1 Saint-Romain	х	х						х	X
2 Trier								х	
3 Littlecote		х	X	x				х	
4 Trier	x (2)		x (2)					x (2)	x (2)
7 Carthage				х					
8 La Chebba	х						х	х	X
11 Écija	Х	х							X
12 Caerwent	x				X		х		X
13 Dair Solaib		Х				x (2)			X
14 Fôret de Brotonne			х					х	X
17 Colchester									X
18 Bavay	х						x?	Х	X
20 Heraclea Lyncestis	x?	Х		х			х	Х	X
21 Aquileia	х	х							X
22 El Jem	Х							Х	X
23 Chania		х	Х					х	X
Total: mosaics	9?	7	4	3	1	1	4?	10	13
Total: animals	10?	7	5	3	1	2	4?	11	14

Table 2 - Quadrupeds as Seasonal Animals, Listed by Season

Quadruped	Winter	Spring	Summer	Autumn
Boar	1 Saint-Romain 4 Trier 8 La Chebba 11 Écija 12 Caerwent 18 Bavay 20 Heraclea ? 21 Aquileia 22 El Jem			
Bull		1 Saint-Romain 11 Écija 13 Dair Solaib 20 Heraclea 21 Aquileia 23 Chania	3 Littlecote	

Deer (Stag/Hind)	3 Littlecote 23 Chania	4 Trier 14 Fôret de Brotonne		
Goat		3 Littlecote 7 Carthage 20 Heraclea		
Hare hunt				12 Caerwent
Horse	13 Dair Solaib			13 Dair Solaib
Hound		8 La Chebba 12 Caerwent 18 Bavay ?		20 Heraclea
Leopard/Leopardess/ Tiger/ Tigress				1 Saint-Romain 2 Trier 3 Littlecote 4 Trier 8 La Chebba 14 Fôret de Brotonne 18 Bavay 20 Heraclea 22 El Jem 23 Chania
Lion			1 Saint-Romain 4 Trier 8 La Chebba 11 Écija 12 Caerwent 13 Dair Solaib 14 Fôret de Brotonne 17 Colchester 18 Bavay 20 Heraclea 21 Aquileia 22 El Jem 23 Chania	

Table 3 - Birds as Seasonal Animals, Listed by Bird

Mosaic	Dove/Pigeon	Duck	Flamingo	Goose	Parrot/ Parakeet	Partridge	Peacock	Pheasant	Purple gallinule
5 Cologne					x (2)				x (2)
6 Piazza Armerina	x (2)		x (2)	x (2)					x (2)
7 Carthage						x (2)			
9 Haïdra		x (2)					x (2)	x (2)	x (2)
10 Carthage		x (2?)				x (2?)		x (2?)	
11 Écija	x (& swallow)	x (2)				x (& bee- eater)			
15 Rome		х					X		
16 El Jem	х	х				х		Х	
19 Knossos					x	х	х		x
23 Chania	х					x		х	
24 Sousse		x (2)				x (2)	x (2)	x (2)	
Total: mosaics	4	6	1	1	2	7	4	5	4
Total: animals	5	10?	2	2	3	10	6	8?	7

Table 4 - Birds as Seasonal Animals, Listed by Season

Bird	Winter	Spring	Summer	Autumn
Dove/Pigeon	6 Piazza Armerina	11 Écija (& swallow) 16 El Jem 23 Chania		
Duck	9 Haïdra 10 Carthage 11 Écija 15 Rome 16 El Jem 24 Sousse			
Flamingo		6 Piazza Armerina		
Goose			6 Piazza Armerina	
Parrot/Parakeet			5 Cologne	19 Knossos
Partridge			7 Carthage 10 Carthage 11 Écija (& bee-eater) 16 El Jem 19 Knossos 23 Chania 24 Sousse	
Peacock		9 Haïdra 15 Rome 19 Knossos 24 Sousse		
Pheasant		10 Carthage	9 Haïdra	16 El Jem 23 Chania 24 Sousse
Purple gallinule	19 Knossos			5 Cologne 6 Piazza Armerina 9 Haïdra

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